

PATENT ABSTRACTS OF JAPAN

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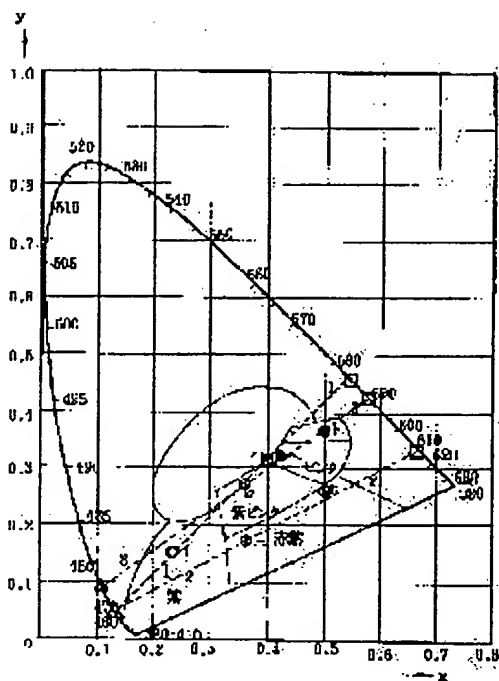
TAKEBE TOSHIHIKO

(54) NEUTRAL TINTS LED

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an LED which is capable of emitting neutral tints such as red violet, pink, or violet.

SOLUTION: An epitaxial light emitting structure, which includes an active layer of ZnSe, ZnCdSe, or ZnSeTe, is formed on an N-type ZnSe substrate doped with I, Al, Br, Cl, Ga or In, and dopants contained in the ZnSe substrate emit fluorescence of yellow orange as irradiated with blue light emitted from the active layer, so that blue and yellow orange are combined to generate neutral tints such as red violet, pink, or violet. Moreover, the epitaxial light-emitting structure is of a multilayered structure which contains a layer of ZnSe, $\text{Zn}_{1-x}\text{Cd}_x\text{Se}$ or $\text{ZnSe}_{1-y}\text{Te}_y$, the peak wavelength of the light emitted from the light-emitting structure is within a range of 460 to 495 nm, and the peak wavelength of exciting light emitted from the ZnSe substrate through self-exciting (SA) method is within the range of 550 to 650 nm.



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